Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 1-21.

22. (New) An EGR control device for an internal combustion engine comprising:

an EGR passage through which an exhaust passage and an intake passage of the internal combustion engine communicate with each other;

an EGR control valve across which the EGR passage extends and which controls a flow rate of EGR gas flowing from the exhaust passage to the intake passage; and

an EGR controller that:

acquires an operational state quantity of the engine;

determines, on the basis of the detected operational state quantity, a target value of an EGR ratio, namely, a ratio of a flow rate of EGR gas sucked by the engine to a flow rate of gas sucked by the engine, as a target EGR ratio;

determines, on the basis of the detected operational state quantity, a target value of a flow rate of air sucked by the engine, as a target air flow rate;

acquires a true EGR ratio on the basis of the detected operational state quantity, as an actual EGR ratio;

acquires, on the basis of the detected operational state quantity, an actual flow rate of air sucked by the engine, as an actual air flow rate; and

defines a target converted EGR ratio as a value corresponding to a ratio of the target EGR ratio to a target excessiveness ratio as being a ratio of the target air flow rate to a

command injection amount, and an actual converted EGR ratio as a value corresponding to a ratio of the actual EGR ratio to an actual excessiveness ratio as being a ratio of the actual air flow rate to the command injection amount,

and controls an actual EGR ratio by controlling an opening of the EGR control valve in accordance with the converted actual EGR ratio and the target converted EGR ratio.

23. (New) The EGR control device according to claim 22, wherein the EGR calculates, as a control target EGR ratio, a value obtained by multiplying the target converted EGR ratio by the actual air flow rate, and controls an opening of the EGR. control valve such that the control target EGR ratio becomes equal to the actual EGR ratio.

24. (New) The EGR control device according to claim 22, wherein the controller determines a target EGR ratio for controlling intake-air oxygen concentration and obtaining such an intake-air oxygen concentration as will suppress generation of nitrogen oxides, calculates a critical target EGR ratio for suppressing generation of smoke or particulate matters, and determines the lower one of the target EGR ratio for controlling intake-air oxygen concentration and the critical target EGR ratio as the target EGR ratio.

25. (New) The EGR control device according to claim 22, wherein the controller determines a target EGR ratio from a command fuel injection amount and an engine rotational speed.

26. (New) The EGR control device according to claim 22, wherein the controller determines a target air flow rate from a command fuel injection amount and an engine rotational speed.

27. (New) The EGR control device according to claim 22, wherein the controller determines an actual EGR ratio from a cylinder inflow gas flow rate and an actual air flow rate.

28. (New) The EGR control device according to claim 22, wherein the controller acquires an actual air flow rate from an air flow meter.

29. (New) The EGR control device according to claim 24, wherein the EGR ratio for controlling intake-air oxygen concentration is determined from a command fuel injection amount and an engine rotational speed.

30. (New) The EGR control device according to claim 24, wherein the critical target EGR ratio is determined from a cylinder inflow gas amount and a smoke critical minimum air flow rate.

31. (New) An EGR control method for an internal combustion engine provided with an EGR passage through which an exhaust passage and an intake passage of the internal combustion engine communicate with each other, and with an EGR control valve across which the EGR passage extends and which controls a flow rate of EGR gas flowing from the exhaust passage to the intake passage, comprising the steps of:

acquiring an operational state quantity of the engine;

determining, on the basis of the detected operational state quantity, a target value of an EGR ratio, namely, a ratio of a flow rate of EGR gas sucked by the engine to a flow rate of gas sucked by the engine, as a target EGR ratio;

determining, on the basis of the detected operational state quantity, a target value of a flow rate of air sucked by the engine, as a target air flow rate;

acquiring a true EGR ratio on the basis of the detected operational state quantity, as an actual EGR ratio;

acquiring, on the basis of the detected operational state quantity, an actual flow rate of air sucked by the engine, as an actual air flow rate; and

defining a target converted EGR ratio as a value corresponding to a ratio of the target EGR ratio to a target excessiveness ratio as being a ratio of the actual air flow rate to a command injection amount, and an actual converted EGR ratio as a value corresponding to a ratio of the actual EGR ratio to an actual excessiveness ratio as being a ratio of the actual air flow rate to the command injection amount, and

controlling an actual EGR ratio by controlling an opening of the EGR control valve in accordance with the actual converted EGR ratio and the target converted EGR ratio.

32. (New) The EGR control method according to claim 31, wherein the EGR ratio control calculates, as a control target EGR ratio, a value obtained by multiplying the target converted EGR ratio by the actual air flow rate, and controls an opening of the EGR control valve such that the control target EGR ratio becomes equal to the actual EGR ratio.

33. (New) The EGR control method according to claim 31, wherein the determination of the target EGR ratio determines a target EGR ratio for controlling intake-air oxygen concentration and obtaining such an intake-air oxygen concentration as will suppress generation of nitrogen oxides, calculates a critical target EGR ratio for suppressing generation of smoke or particulate matters, and determines the lower one of the target EGR ratio for controlling intake-air oxygen concentration and the critical target EGR ratio as the target EGR ratio.

34. (New) The EGR control method according to claim 31, wherein the determination of the target EGR ratio determines a target EGR ratio from a command fuel injection amount and an engine rotational speed.

35. (New) The EGR control method according to claim 31, wherein the determination of the target air flow rate determines a target air flow rate from a command fuel injection amount and an engine rotational speed.

36. (New) The EGR control method according to claim 31, wherein the acquisition of the actual EGR ratio determines an actual EGR ratio from a cylinder inflow gas flow rate and an actual air flow rate.

37. (New) The EGR control method according to claim 31, wherein the acquisition of the actual air flow rate acquires an actual air flow rate from an air flow meter.

38. (New) The EGR control method according to claim 33, wherein the EGR ratio for controlling intake-air oxygen concentration is determined from a command fuel injection amount and an engine rotational speed.

39. (New)The EGR control method according to claim 33, wherein the critical target EGR ratio is determined from a cylinder inflow gas amount and a smoke critical minimum air flow rate.